5

10

15

20

A METHOD AND SYSTEM FOR SELECTING AN OPTIMAL AUCTION FORMAT

ABSTRACT OF THE DISCLOSURE

The present invention provides an automated estimation and optimization solution for selecting the best auction format. An embodiment of the present invention provides a method and system that determines the latent elements of the auction environment taking into account the strategic and information conditions with minimal assumptions on the distributions of unobserved random elements. In one embodiment of the present invention, structural analysis of bid data from prior auctions is used to identify and estimate the distributions of bidders' private signals conditional on observable bidder characteristics. In one embodiment, the estimated signal distributions, identified by the structural analysis, are used to evaluate alternative auction formats and to select the best format from among a given set of candidates. In one embodiment, the present invention provides decision support tools to select an auction format based on structural econometric analysis of available data on the market environment. The present invention allows a decision-maker to estimate the unobservable private signals of the bidders and to determine the best auction format the decision maker can employ to sell a given set of items.